

## Overview

`gemini-cli` is a powerful command-line interface developed by the Google DeepMind team. It allows users to interact with Gemini models directly from the terminal, automate tasks, and integrate AI into shell workflows.

## Setup and Settings

- Key Configuration: `export GOOGLE_API_KEY="your_api_key_here"`.
- Basic Prompt: `gemini "What is the capital of France?"`.
- Model Selection: `gemini --model flash "text..."`.
- System Prompt: `gemini --system "You are a helpful coding assistant" "Explain..."`.

## File and Data Interaction

- Read from File: `cat code.py | gemini "Explain this code"`.
- Pass Local Files: `gemini --file image.png "What's in this image?"`.
- Multiple Files: `gemini --file data.csv --file report.pdf "Summarize the relationship between these files"`.

## Automation and Scripting

- Inline Shell Assistant: `gemini --shell "find all logs and zip them"`.
- Batch Processing:

```
for file in *.txt; do
  cat "$file" | gemini "Summarize to one bullet point" > "${file%.txt}_summary.txt"
done
```
- Pipe Integration: `ls | gemini "Categorize these files into groups"`.

## Advanced Flags

- `--temperature`: Control randomness (0.0 for deterministic, 1.0 for creative).
- `--top_p`, `--top_k`: Advanced sampling parameters.
- `--max_tokens`: Limit the length of the response.

- `--json`: Output result in JSON format (useful for parsing in scripts).

## Context and History

- Multi-turn Conversation: Use `--chat` mode to maintain context across prompts.
- Snapshot: Save the state of a session for later resume.

## Use Cases

- Code Review: `git diff | gemini "Review these changes for security vulnerabilities"`.
- Log Analysis: `tail -n 100 error.log | gemini "Identify the root cause of the error"`.
- Translation: `cat article.md | gemini "Translate this into professional Korean"`.

## Pro Tips

### System Context

Use the `--system` flag to define a persistent persona or set of constraints (e.g., "Respond only in valid JSON").

### Speed vs Quality

Use the `flash` model for high-speed, cost-effective tasks (like classification) and the standard `pro` model for complex reasoning and creative generation.

### Shell Formatting

If the output contains code blocks, use `gemini ... | glow` (if installed) or redirects to files to preserve formatting.